



OpenSciEd Research Seed Funding Opportunity Request for Applications

Background on the OpenSciEd Research Agenda

OpenSciEd is a set of Creative Commons licensed, freely available curriculum materials addressing Next Generation Science Standards (NGSS) in middle and high school grades. The design and affordances of OpenSciEd can uniquely enable research to address important knowledge gaps about science learning, teaching, classroom implementation, and contextual factors. Rigorous research involving OpenSciEd curriculum materials is urgently needed to support the deep engagement of K-12 students in relevant and meaningful STEM experiences. These findings have the potential to advance the knowledge, skills, and practices needed to promote powerful learning for students and teachers from diverse backgrounds and learning contexts.

Digital Promise, with support from the Carnegie Corporation of New York (CCNY), led a community process that resulted in the OpenSciEd Research Agenda to catalyze the research community around OpenSciEd. Specifically, we engaged a group of 79 science education stakeholders in a series of working group sessions to collectively generate, prioritize, and refine potential research questions that (1) center educational equity, (2) leverage OpenSciEd's distinctive features and affordances, and (3) address salient knowledge gaps and needs in science education. We have synthesized the insights from working group artifacts into several cross-cutting themes detailed in the [OpenSciEd Research Agenda white paper](#).

Seed funding opportunity

Digital Promise and the CCNY is now offering support for teams of researchers to develop OpenSciEd-enabled grant proposals. The OpenSciEd Research Agenda project will award between 6 and 10 seed grants of \$6,000 to \$10,000 to support scholars' efforts to advance a proposal concept. The supported activities will result in the submission of a competitive grant proposal valued at \$250,000 or more to a federal program (e.g., National Science Foundation, Institute of Education Sciences), philanthropic foundation, or other grant awarding organization. The focus of the proposal could be research, design and development, evaluation, synthesis, or another focus aligned with the distinctive features and affordances of OpenSciEd curriculum materials. Seed funding could be requested to develop strong applications for CAREER grants or other opportunities specific to emerging scholars or minority-serving institutions. The proposal concept could address (but is not limited to) themes identified in the [OpenSciEd Research Agenda white paper](#).

Expectations for the grant period

Seed funds may be used for travel to work together; to engage consultants or advisors; to support a graduate student to perform a literature review or analyze preliminary data; to provide honoraria to educators, students or other stakeholders to give input on a concept; to support the salary of the seed grant recipient to advance the proposal; or for other expenses



directly related to improving a proposal concept prior to submission. With support from the Digital Promise team, seed grant recipients will be expected to engage in the following activities:

- Schedule and attend regular (e.g., monthly) check-ins with the Digital Promise team;
- Identify one or two specific grant programs for which they intend to develop and submit a proposal;
- Develop a plan for advancing the proposal concept during the grant period in a way that will result in a competitive grant proposal;
- Produce artifacts demonstrating progress toward the submission of a competitive proposal. Examples of artifacts include concept papers, literature reviews, research designs, preliminary analyses, and proposal drafts;
- Provide evidence of proposal submission.

Digital Promise's role

Throughout the grant period, the Digital Promise team will provide thought partnership, feedback, and support in ways that meet the needs of the grant recipients. Digital Promise will also facilitate beneficial interactions across seed funding teams as appropriate. Examples of support include identifying well-aligned opportunities for the proposal submission, finding appropriate collaboration partners, and engaging in reflective discussion and critical feedback on proposal artifacts including proposal drafts.

Award eligibility

Stakeholders in science and STEM education, learning sciences, STEM disciplines, or related fields who are able to serve as a principal investigator or lead on a grant proposal submission are eligible to apply. Priority will be given to early-career scholars and/or applicants who do not have an extensive history of research grant funding. Applications from individuals from underrepresented groups in STEM professions and/or from minority-serving institutions are strongly encouraged.

Application deadline

- December 17, 2021

Notification of awards

- January 31, 2022

Grant Period

- February 1, 2022 - September 30, 2022

Application requirements

The application will be an [online form](#) available on our webpage by Nov. 15, 2021. Applicants will describe their background, provide a brief equity statement, describe the activities that will be supported by requested funding, and identify one or two potential funding programs. Applicants will also submit a 1000-word concept paper (not including figures, tables, and references). The concept paper should:



- Provide an overview of the need, research questions, perspectives, research design and/or development approach, and expected collaborators or partnerships;
- Clearly describe how the proposal idea meets the three primary criteria detailed in the [OpenSciEd Research Agenda white paper](#): (1) centers equity, (2) uniquely enabled by OpenSciEd, and (3) addresses salient gaps or needs in science education.

Review Process

Digital Promise will confirm that submitted applications have all required elements. Then Digital Promise will invite a peer review panel highly familiar with the OpenSciEd research agenda to review the proposals. Reviewers will rate applications on their fit to the three primary criteria, their potential to result in a competitive grant proposal, and the priority for early-career scholars (as described above).

Digital Promise considers all applications without regard to race, color, religion, creed, gender, national origin, age, disability, marital or veteran status, sexual orientation, or any other legally protected status.

Questions concerning the seed funding opportunity or application process should be directed to **Kevin McElhaney** (kmcelhaney@digitalpromise.org). Visit our [webpage](#) for more information about the OpenSciEd Research Agenda and additional resources.